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5-106.2

COMMENTS - INTEGRATED ENVIRONMENTAL MONITORING PLAN

09/16/96

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OEPA
25
COMMENTS

DOE-FN



State of Ohio Environmental Protection Agency

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SEP 13 1996

FILE 5412

George V. Voinovich
Governor

September 16, 1996

RE: DOE FEMP
MSL #531-0297 COMMENTS-
INTEGRATED ENVIRONMENTAL
MONITORING PLAN

Mr. Johnny Reising
U.S. DOE FEMP
P.O. Box 398705
Cincinnati, OH 45329-8705

Dear Mr. Reising:

Ohio EPA has reviewed the "Integrated Environmental Monitoring Plan" submitted by DOE on August 1, 1996. This letter provides as an attachment the comments of both the Ohio EPA and the Ohio Department of Health, Bureau of Radiation Protection.

If you should have any questions, please contact me at (513) 285-6466 or Donna Bohannon at (513) 285-6543.

Sincerely,

Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

cc: Jim Saric U.S. EPA
Terry Hagen, FERMCO
Ruth Vandegrift, ODH
Sharon McClellan, PRC
Manager TPSS, DERR/CO
Dave Ward, GeoTrans
Bill Lohner, OEPA
Joe Bartoszek, OEPA
Mike Proffitt, OEPA

(nick) (K)
partial action
response to
doe-1187-96 (9903)

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INTEGRATED ENVIRONMENTAL MONITORING PLAN

General Comments

1. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: General Pg #: n/a Line #: n/a Code: C

Original Comment #:

Comment: The goals of this plan do not appear to be met. Environmental, emission, and effluent monitoring appear to be conducted by different groups throughout the document. It is unclear which organization is specifically responsible for reporting environmental data. We suggest that a "compliance cross-walk" as is used in remedial design packages be used in the summary to help clarify how ARARs, TBCs, etc., will be monitored and reported.

Response:

Action:

Specific Comments

2. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 1.0 Pg #: General Line #: n/a Code: C

Original Comment #:

Comment: Most remedial designs have referred to the IEMP for the specifics of environmental monitoring as it applies to the individual project. This plan seems to place the burden of project specific environmental monitoring on the specific project. This apparent contradiction for monitoring responsibilities should be resolved.

Response:

Action:

3. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 1.2 Pg #: 1-2 Line #: 23-26 Code: C

Original Comment #:

Comment: It is stated that DOE Orders 5400.1 and 5400.5 are TBC requirements in each of the RODs for the operable units. These DOE Orders apply to **sitewide** environmental monitoring activities to ensure that the site as a **whole** is protective of the public and the environment. The fact that these orders are TBCs rather than ARARs should not dismiss them as not important.

Response:

Action:

4. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 1.2 Pg #: 1-3 Line #: 12 Code: E

Original Comment #:

Comment: It appears as though this should read "...maintaining a baseline data set of environmental conditions..." Please clarify.

Response:

Action:

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5. Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 1.2 Pg #: 1-3 Line #: 12-19 Code: E

Original Comment #:

Comment: The short term risk assessment states that contaminant releases are expected to be inconsequential. The risk assessment is an estimate using best available resources. The fact that the assessment identified releases to be inconsequential should not be used to undermine the importance of a comprehensive environmental monitoring plan. Why this information is included in this paragraph is unclear.

Response:

Action:

6. Commenting Organization: Ohio EPA Commentor: DSW
 Section #: 1..2 Pg #: 1-3 Line #: 14-16 Code: C

Original Comment #:

Comment: It does not seem appropriate to state that the contaminant releases are expected to be inconsequential here. For example, it may be that the population of Sloan's Crayfish on the site will be extirpated by the release of sediments during remedial activities.

Response:

Action:

7. Commenting Organization: Ohio EPA Commentor: DSW
 Section #: 1.2 Pg #: 1-3 Line #: 31-32 Code: C

Original Comment #:

Comment: This states that project-specific emission-control monitoring is outside the scope of the IEMP whereas lines 9-10 on page 1-3 indicate that project-specific emission-control monitoring is within the comprehensive functions of the IEMP. Please clarify.

Response:

Action:

8. Commenting Organization: Ohio EPA Commentor: OFFO/DSW
 Section #: 1.3 Pg #: 1-4, 1-5 Line #: Code: M

Original Comment #:

Comment: It appears as though the scope of the IEMP has been expanded slightly over the scope of the EMP by the addition of the NESHAP and part of the NPDES requirements. The rationale for not including all of the environmental monitoring is not clear. For example the SWPPP monitoring under the NPDES permit and the monitoring of the Sloan's Crayfish under the Sloan's Crayfish Management Plan would appear to be best located under the IEMP umbrella (the OUS RAWP, Appendix D, Sloan's Crayfish Management Plan already refers to the IEMP as the document in which monitoring populations of the crayfish is addressed). The current scope seems to confuse the issue of who may be responsible for monitoring, for example with some of the NPDES stormwater monitoring falling under the SWPPP and some under the IEMP. The

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Draft Natural Resource Impact Assessment (August 1996) states that "The plan and commitment for monitoring and reporting natural resource impacts will be outlined in the Integrated Environmental Monitoring Plan (IEMP)." OEPA strongly recommends expanding the scope of the IEMP to include all environmental monitoring associated with remedial activities including project-specific emission-control monitoring. This would include the monitoring of sediment basins, fugitive dust, Sloan's crayfish, other natural resources and any other environmental monitoring associated with remediation. What would fall outside of this scope is the certification sampling associated with a project-specific pre-remedial activity.

Response:

Action:

9. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 1.2 Pg #: 1-5 Line #: 1-10 Code: M

Original Comment #:

Comment: This bullet states that the Natural Resource Impact Monitoring Plan will be prepared independent of the IEMP and the results reported in the IEMP quarterly and annual reporting. However the Sloan's Crayfish Management Plan found in Appendix D of the OU5 RAWP already refers to the IEMP as the document in which monitoring populations of the crayfish is addressed. Page 5 of the Draft Natural Resource Impact Assessment (August 1996) states that "The plan and commitment for monitoring and reporting natural resource impacts will be outlined in the Integrated Environmental Monitoring Plan (IEMP)." The IEMP should encompass monitoring of the natural resources and the NRIMP should be brought under the umbrella of the IEMP. See previous comment.

Response:

Action:

10. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 1.3 Page#: 1-5 Line#: 30-35 Code: C

Original Comment#:

Comment: This paragraph is unclear and difficult to see the whole IEMP picture. Additionally, it isn't clear how each regulatory driver, ARARS, the surveillance monitoring, and the split sampling with Ohio EPA exactly fit into the IEMP.

Response:

Action:

11. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 1.4 Page#: 1-7 Line#: 7 Code: C

Original Comment#:

Comment: Why Biota? The term does not clearly suggest produce. Webster defines biota as *the plant and animal life of a region*. From this definition, biota does not seem to be the appropriate term. Ohio EPA recommends using *produce*, since that is what the public is use to and

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understands.

Response:

Action:

12. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 1.4

Page #: 1-7

Line#: 30-36 Code: C

Original Comment#:

Comment: This last paragraph is unclear. It is difficult to understand how the IEMP will tie together the sections presented. Words such as *administrative* and *geographic boundaries*, and *sitewide monitoring* need defining.

Response:

Action:

13. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 1.4

Pg #: 1-8

Line #: 3-7

Code: C

Original Comment #:

Comment: The statement is made that "Any reductions or alterations in existing scope...were made based on the knowledge of...the expectations of the stakeholders..." Please explain the source of the information regarding the stakeholders expectations.

Response:

Action:

14. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 2.1

Pg #: 2-2

Line #: 10-13

Code: C

Original Comment #:

Comment: There are parts of the plan that are written in such a way as to be very difficult to understand. This is one of those areas. Please be clearer.

Response:

Action:

15. Commenting Organization: Ohio EPA Commentor: DSW

Section #: Table 2-1 Pg #: 2-5

Line #: OU1

Code: E

Original Comment #:

Comment: Spelling error under Waste Pits Remedial Action Project "Apprach" should read "Approach".

Response:

Action:

16. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 3.1 Pg #: 3-1

Line #: 19-32

Code: C

Original Comment #:

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Comment: Will the IEMP be modified once various modules are removed from service? The Ohio EPA wants to ensure that adequate post clean-up monitoring is conducted in order to determine remediation effectiveness.

Response:

Action:

17. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 3.1 Pg #: 3-2 Line #: 6 Code:

Original Comment #:

Comment: Change RCRA to RCRA/DF&O (Director's Findings and Orders)

Response:

Action:

18. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 3.1 Pg #: 3-2 Line #: 4-10 Code:

Original Comment #:

Comment: Add "Post Clean-up Ground Water Monitoring"

Response:

Action:

19. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 3.2 Page #: 3-2 Line#: 27 Code: C

Original Comment#:

Comment: Again, please clarify *administrative boundaries*.

Response:

Action:

20. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 3.3 Page #: 3-5 Line#: 17 & 21 Code: C

Original Comment#:

Comment: Please clarify *media-specific monitoring* and *line of responsibility*.

Response:

Action:

21. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 3.3 Pg #: 3-7 Line #: 1-7 Code: C

Original Comment #:

Comment: This section is unclear as to whether GMA restoration activities and long term GMA post clean-up ground water monitoring will be included in the IEMP.

Response:

Action:

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22. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 3.3 Page #: 3-7 Line#: 11-12 Code: C

Original Comment#:

Comment: This statement is incorrect. Ruetgers-Nease manufactures aromatic sulfonated compounds. Albright and Wilson make phosphate compounds for soaps, detergents, and soft-drinks.

Response:

Action:

23. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 3.3 Page #: 3-7 Line#: 12-14 Code: C

Original Comment#:

Comment: This statement is not entirely true. The PRRS Companies released the compounds described into the Great Miami River however, the quantities of pesticides were small. Since the origin of the pesticides were difficult to determine (groundwater contamination was either due to the Companies or caused from farming practices in the area), the Companies were not held responsible for them. The other compounds listed are more of a concern.

Response:

Action:

24. Commenting Organization: Ohio EPA

Commentor: DDAGW

Section #: 3.4.1 Pg #: 3-8 Line #: 3 Code: E

Original Comment #:

Comment: Change 1987 and 1988 to 1997 and 1998.

Response:

Action:

25. Commenting Organization: Ohio EPA

Commentor: DDAGW

Section #: 3.4.2.1 Pg #: 3-8 Line #: 28 Code: C

Original Comment #:

Comment: As stated many times prior, the saturated till is the uppermost aquifer where present. This line is misleading as stated and needs to be reworded.

Response:

Action:

26. Commenting Organization: Ohio EPA

Commentor: DDAGW

Section #: 3.4.2.1 Pg #: 3-15 Line #: 1-8 Code: C

Original Comment #:

Comment: At this time, the optimization plans are tentative, and may be altered due to property ownership constraints. Revise this section accordingly.

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Response:

Action:

27. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 3.4.2.3 Pg #: 3-19 Line #: 20 Code: E

Original Comment #:

Comment: Add "post clean-up ground water monitoring" to this sentence.

Response:

Action:

28. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 3.5.1.1 Pg #: 3-36 Line #: Un-numbered table Code: C

Original Comment #:

Comment: A discussion of field parameters is warranted in the text and field parameters should be listed in the tables.

Response:

Action:

29. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 3.5.1.1 Pg #: 3-37 Line #: 13 Code: C

Original Comment #:

Comment: Frequency of the arsenic sampling will have to be temporarily increased if pumping rates or scenarios are altered.

Response:

Action:

30. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 3.5.1.4 Pg #: 3-44 Line #: Fig. 3-13 Code: C

Original Comment #:

Comment: These well clusters are 500 feet apart. Waste pit excavation will be disturbing very contaminated materials which are in direct contact with the GMA. A denser ground water monitoring well system is warranted.

Response:

Action:

31. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 3.5.1.4 Pg #: 3-45 Line #: 7-8 Code: C

Original Comment #:

Comment: Constituents characterized as >MP should be sampled quarterly during removal.

Response:

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Action:

32. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 3.5.2.1 Page #: 3-51 Line#: 14 Code: C

Original Comment#:

Comment: Have modifications to the private well program already been implemented? Effective June 1996, Ohio EPA was under the impression that FERMC0 has reduced sample collection to the three Knollman wells. Is this not the case, please clarify.

Response:

Action:

33. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 3.5.2.1 Page #: 3-51 Line#: 11 Code: C

Original Comment#:

Comment: The private well monitoring program falls under DOE orders 5400.5 and 5400.1. Ohio EPA does not consider DOE orders compliance based, unless the orders are listed in the Federal Register. Please clarify.

Response:

Action:

34. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 3.6 Pg #: 3-60 Line #: Fig 3-19 Code: C

Original Comment #:

Comment: This report covers ground water monitoring for 1997-1998. Only cells to be constructed in this time frame should be shown.

Response:

Action:

35. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: 3.6.1 Pg #: 3-61 Line #: Code: C

Original Comment #:

Comment: Discussion of ground water flow is warranted. The DOE needs to illustrate expected flow for 1997 and 1998 in relation to monitoring well placement. This will be most important for future IEMPs once ground water pump and treat systems are on-line.

Response:

Action:

36. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 4.1 Pg #: 4-1 Line #: 10-23 Code: C

Original Comment #:

Comment: This states that the surface water integrated objectives serve both as a sitewide

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surveillance and compliance function. It would appear that this would lend weight to expanding the plan to include the monitoring under the SWPP and the project specific emission control (e.g. the sampling of sediment basins).

Response:

Action:

37. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 4.1 Pg #: 4-1 Line #: 29-32 Code: C

Original Comment #:

Comment: This bullet seems to indicate that the monitoring of sediment basins during remedial activities would fall under the IEMP rather than the SWPPP. Ohio EPA would prefer the sediment basin monitoring as this statement indicates however, the IEMP states elsewhere that project-specific emission-controls are not within the scope of the IEMP. This issue needs to be resolved.

Response:

Action:

38. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 4.2 Pg #: 4-2 Line #: 14-18 Code: C

Original Comment #:

Comment: It appears as though NPDES regulatory driven requirements have been omitted from this by mistake.

Response:

Action:

39. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 4.2.1 Pg #: 4-2 Line #: 34 Code: E

Original Comment #:

Comment: There is an additional parenthesis after FFCA.

Response:

Action:

40. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 4.2.2 Pg #: 4-3 Line #: 14 Code: C

Original Comment #:

Comment: "The NPDES permit became..." should read "The current NPDES permit became..."

Response:

Action:

41. Commenting Organization: Ohio EPA Commentor: DSW

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Section #: 4.3 Pg #: 4-4 Line #: 5-7 Code: C

Original Comment #:

Comment: As stated previously, the emission control project specific monitoring would appear to best be under the umbrella of the IEMP.

Response:

Action:

42. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 4.3 Page #: 4-4 Line#: 9-30 Code: C

Original Comment#:

Comment: The terms *programmatic boundary* and *media-specific responsibilities* are not clear in their meaning. Please clarify.

Response:

Action:

43. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 4.4.1 Pg #: 4-7 Line #: 10-12 Code: C

Original Comment #:

Comment: This would seem to best be accomplished by incorporating the project specific emission control monitoring into this plan.

Response:

Action:

44. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 4.4.2.3 Pg #: 4-15 Line #: 14-19 Code: C

Original Comment #:

Comment: As much of Paddy's Run on site (Figure 4-4) lacks a protective glacial till and infiltration always occurs, it seems prudent to monitor surface water prior to the point where Paddy's Run flows off the FEMP property. Therefore sampling points should also be located at points upstream of infiltration areas (the IEMP has sampling stations at SWD-02, 4002, STRM 4004, SWP-02, STRM 4005, and STRM 4006 which address this as well as other location criteria listed).

Response:

Action:

45. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 4.4.3 Pg #: 4-25 Line #: 3-7 Code: C

Original Comment #:

Comment: OEPA recommends adding a station on the Great Miami River downstream of the confluence of Paddy's Run to demonstrate any impact or lack thereof downstream of the site.

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Response:
Action:

46. Commenting Organization: Ohio EPA Commentor: DSW
Section #: 4.4.3 Pg #: 4-25 Line #: 3-7 Code: C
Original Comment #:

Comment: OEPA recommends adding a station on Paddy's Run in the vicinity of the Route 128 bridge. This station is influenced by groundwater that has been contaminated from the site and could be co-located with a sediment sampling site.

Response:
Action:

47. Commenting Organization: Ohio EPA Commentor: DSW
Section #: 4.4.2.4 Pg #: 4-19 Line #: 15-16 Code: C
Original Comment #:

Comment: Please describe in more detail the location that has consistently shown elevated levels of uranium.

Response:
Action:

48. Commenting Organization: Ohio EPA Commentor: DSW
Section #: 4.4.2.4 Pg #: 4-19 Line #: 22-24 Code: C
Original Comment #:

Comment: Please describe in more detail the two locations to be sampled. It appears from figure 4-9 that there is only one location.

Response:
Action:

49. Commenting Organization: Ohio EPA Commentor: DSW
Section #: 4.4.2.4 Pg #: 4-19 Line #: 22 Code: E
Original Comment #:

Comment: "...monitored monthly for a total..." should read "...monitored monthly for total..."

Response:
Action:

50. Commenting Organization: Ohio EPA Commentor: DSW
Section #: Table 4-2 Pg #: 4-29 Line #: SWD-01 Code: C
Original Comment #:

Comment: The northeast drainage area has radiological constituents exceeding the FRL (OU5 RAWP) but these do not appear on the parameter selection. Please explain.

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Response:

Action:

51. Commenting Organization: Ohio EPA Commentor: DSW

Section #: Table 4-2 Pg #: 4-32 Line #: footnote Code: C

Original Comment #:

Comment: Soils in the drainages of both STRM 4003 and STRM 4006 exceeded the FRL as well. These should also be sampled for total uranium.

Response:

Action:

52. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 4.5.2 Pg #: 4-34 Line #: 10-13 Code: C

Original Comment #:

Comment: Locations not included are the northeast drainage, pilot plant drainage ditch, and two from the storm sewer outfall ditch.

Response:

Action:

53. Commenting Organization: Ohio EPA Commentor: ODH

Section #: Table 4-4, 4-5, & 4-11 Pg #: Line #: Code: C

Original Comment #:

Comment: In Tables 4-4, 4-5, and 4-11 the analysis for Total Uranium indicates a holding time of 12 months without preservation via acidification. This appears contrary to generally accepted procedures for stabilizing radionuclides to preclude plating out on the sample container walls and loss of the analyte.

Response:

Action:

54. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 4.5.2.1 Pg #: 4-50 Line #: 7-12 Code: C

Original Comment #:

Comment: This method of collecting water samples in the Great Miami River seems excessive. For the purpose of surveillance a single grab from the river should be sufficient and should be adequate to meet the data quality objectives of surveillance monitoring. This would free up personnel time for additional monitoring, which is preferable to collecting transverse aliquots at one station.

Response:

Action:

55. Commenting Organization: Ohio EPA Commentor: OFFO

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Section #: 5.1 Page #: 5-1 Line#: 15-18 Code:

Original Comment#:

Comment: This paragraph does not state clearly what drives the sediment monitoring program. It is understood that it will follow the existing EMP however, the changes that may take place based on surface water and sediment controls is somewhat unclear. Are these controls different from remediation controls that will be put in place for specific projects? Please clarify.

Response:

Action:

56. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 5.2 Page #: 5-3 Line#: 17-19 Code: C

Original Comment#:

Comment: Again, clarify *programmatic boundaries*?

Response:

Action:

57. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 5.5.2 Pg #: 5-10 Line #: 35-38 Code: C

Original Comment #:

Comment: The reason for two background locations is unclear. OEPA recommends one background station at G-2.

Response:

Action:

58. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 5.5.2 Pg #: 5-10 Line #: 25-32 Code: C

Original Comment #:

Comment: OEPA recommends that one of the samples from the south of the confluence include the ground water feed area in the vicinity of the Route 128 bridge.

Response:

Action:

59. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 5.5.2.1 Page #: 5-11 Line#: 1-4 Code: C

Original Comment#:

Comment: The sediment sampling procedures in the EP-REM-010 are not clear and/or exact. They are difficult to follow due to the lack of detail. Was there any consideration given to the IEMP having its own procedure's section? This would eliminate another document referral and tie in the concept of one-living document.

Response:

Action:

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60. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 5.5.2.1 Page#: 5-11 Line#: 9 Code: C

Original Comment#:

Comment: The top few centimeters of sediment collected should consist of fine materials.

Response:

Action:

61. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.1 Pg #: 6-1 Line #: 26-31 Code: C

Original Comment #:

Comment: This paragraph states that the IEMP has the responsibility for monitoring the air pathway and performing the dose assessment to satisfy the requirements of 40 CFR 61 Subpart H, as well as, DOE Orders 5400.1 and 5400.5. Throughout Section 6, the plan delegates monitoring responsibilities to specific projects. Specifically, how will source-specific air emission monitoring be performed and how will the data be compiled, compared and reported.

Response:

Action:

62. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.1 Pg #: 6-2 Line #: 2-7 Code: C

Original Comment #:

Comment: It is stated that the data will be periodically reviewed. How often is periodically and who will review the data?

Response:

Action:

63. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.2 Pg #: 6-2 Line #: 27-32 Code: C

Original Comment #:

Comment: It was stated earlier that the IEMP has the responsibility for physical monitoring (Section 6.1, page 6-1 lines 26-31). This paragraph contradicts this responsibility and states that this monitoring will be performed by the specific projects.

Response:

Action:

64. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.2.1 Pg #: 6-3 Line #: 1-8 Code: C

Original Comment #:

Comment: Stack emission monitoring should be included under the IEMP umbrella. Stack emission monitoring is one of the requirements of 40 CFR 61, Subpart H and should be included with the other requirements of this rule.

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Response:

Action:

65. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.2.2 Pg #: 6-3 Line #: 18-20 Code: C

Original Comment #:

Comment: The "existing EMP" is referenced throughout this section of the plan. If the EMP will no longer exist after the implementation of the IEMP, is it proper to reference this document in this way.

Response:

Action:

66. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.2.2 Pg #: 6-3,4 Line #: 37-41,1-2 Code: C

Original Comment #:

Comment: How will the limits of 10 CFR 834 be met once this rule is promulgated? (One might expect this rule to promulgated in the near future).

Response:

Action:

67. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.2.2 Pg #: 6-4 Line #: 3-12 Code: E

Original Comment #:

Comment: This paragraph repeats the information listed under DOE Order 5400.5, that pertains 40 CFR 61, Subpart H.

Response:

Action:

68. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.2.2 Pg #: 6-4 Line #: 29 Code: E

Original Comment #:

Comment: The limits should read 150 $\mu\text{g}/\text{m}^3$ and 50 $\mu\text{g}/\text{m}^3$ respectively.

Response:

Action:

69. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.2.2 Pg #: 6-5 Line #: 11-15 Code: C

Original Comment #:

Comment: Point source monitoring as required in 40CFR61, Subpart H should be included under the IEMP "umbrella". If not physically, monitoring results should be compiled by one organization to demonstrate compliance with 40CFR61, Subpart H. Please provide a table listing

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emission sources and who has monitoring responsibilities.

Response:

Action:

70. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.2.2 Pg #: 6-5 Line #: 22-25 Code: C

Original Comment #:

Comment: It is not clear why some project specific radon monitoring activities will be conducted under the IEMP and others will not. Please provide a table listing radon sources and who has monitoring responsibilities.

Response:

Action:

71. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.2.2 Pg #: 6-6 Line #: 1-7,15-21 Code: C

Original Comment #:

Comment: How and who will be responsible for demonstrating compliance with Ohio's fugitive dust rules?

Response:

Action:

72. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.3 Pg #: 6-6,7 Line #: General Code: C

Original Comment #:

Comment: The boundary definition between the IEMP and specific project monitoring is not clear as expressed in this document. A summary of project specific monitoring requirements should be included in the IEMP.

Response:

Action:

73. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 6.4.2.2 Pg #: 6-17, 20 Line #: n/a Code: C

Original Comment #:

Comment: Tables 6-3 and 6-4 show different frequencies for the collection of radon monitoring data from the continuous radon monitors. One states "daily" the other states "continuous/weekly".

Response:

Action:

74. Commenting Organization: Ohio EPA Commentor: ODH

Section #: 6.4.2.2 Pg #: 21 Line #: Code: C

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Original Comment #:

Comment: As the real time Radon Monitors rely on passive diffusion of Radon through the foam covering to reach the alpha scintillators inside, dusts deposited on the foam may act as a barrier to this, especially if they are deployed in an area where dust generation may be heavy. What are the contingencies to minimize this?

Response:

Action:

75. Commenting Organization: Ohio EPA Commentor: ODH

Section #: 6.4.4.2.3 Pg #: 21 Line #: Code: C

Original Comment #:

Comment: For the environmental TLD's, the holding times are designated "NA". Does this mean they are read soon after collection? Otherwise fading of the light output used to estimate dose may occur if TLD's are held for too long before reading.

Response:

Action:

76. Commenting Organization: Ohio EPA Commentor: ODH

Section #: 6.6 Pg #: 6-35 Line #: 28 Code: E

Original Comment #:

Comment: The sentence, "Both of the above reporting requirements..." should be changed to "All three of the above reporting requirements..."

Response:

Action:

78. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 7.0 Pg #: 7-1 Line #: 1 Code:

Original Comment #:

Comment: This program addresses produce (and briefly discusses fish), there is no mention of crayfish, other aquatic biota, or any other plant or animal life, therefore the title of the program seems misleading. This section should include other biota or be called "produce".

Response:

Action:

79. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 7.1 Page #: 7-1 Line#: 13-20 Code: C

Original Comment#:

Comment: Ohio EPA believes DOE should re-evaluate historical produce sampling data. The evaluation should be based upon samples collected from gardens adjacent to the site. Produce and soil samples collected from vendor stands should not be included in this evaluation due to the unknown sources for the produce. This evaluation should result in a succinct data table as a

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basis for decisions regarding future produce sampling.

With regard to the proposed three year time frame for sampling, Ohio EPA believes the activities over the course of the next nine (?) years may result in fugitive dust emissions. These type of emissions are the most likely to affect produce. Ohio EPA would recommend an approach which focuses on one or two downwind locations sampled annually with the need for additional sampling being evaluated yearly in the annual report.

Response:

Action:

80. Commenting Organization: Ohio EPA Commentor: DSW
 Section #: 7.2.2 Pg #: 7-2 Line #: 25-33 Code: C
 Original Comment #:

Comment: The Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance, DOE, 1991, page 5-2, table 5-1 states that environmental surveillance *should* be performed at least every five years to confirm projected dose levels less than or equal to 0.1 mrem. OEPA recommends periodic confirmation.

Response:

Action:

32)

81. Commenting Organization: Ohio EPA Commentor: DSW
 Section #: 7.2.2 Pg #: 7-2 Line #: 34-35 Code: C
 Original Comment #:

Comment: This statement limits the scope of the biota monitoring program to human exposure pathways. The biota monitoring program should extend beyond the scope of human exposure pathways and include monitoring such as the Sloan's Crayfish populations on site, aquatic organism exposure, etc.

Response:

Action:

82. Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 7.2.2 Page #: 7-3 Line#: 4-8 Code: C
 Original Comment#:

Comment: As previously mentioned, Ohio EPA believes that DOE should re-evaluate the produce sampling program and continue to do so on a yearly basis in DOE's Annual Report. In addition, Ohio EPA recommends that DOE consider the public's comments and their interest regarding the produce program on a yearly basis to help determine whether to continue sampling or terminate the program.

Response:

Action:

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83. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 7.2.2

Page #: 7-3

Line#: 8-9

Code: C

Original Comment#:

Comment: Ohio EPA believes that DOE should continue to sample the soil along with the produce until results indicate that one media or both be dropped from the program. This comment is based upon a previous one in regards to re-evaluating the produce and soil sampling program. Until DOE can provide consistent data from the gardens in the Fernald area and show no correlation between total uranium concentrations between the vegetables and soil, Ohio EPA recommends that soil samples continue to be collected.

Response:

Action:

84. Commenting Organization: Ohio EPA

Commentor: DSW

Section #: 7.2.2

Pg #: 7-4

Line #: 7-8

Code: C

Original Comment #:

Comment: Although OEPA concurs with the factors considered in the decision to discontinue the fish monitoring in the Great Miami River, OEPA recommends monitoring on a periodic basis, at least every five years.

Response:

Action:

34) 85. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 7.3

Pg #: 7-4

Line #: 10-16

Code: C

Original Comment #:

Comment: The scope of the biota monitoring program is too limited. There is much more monitoring to be done than produce alone.

Response:

Action:

86. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 7.4.2

Page #: 7-5

Line#: 4-5

Code: C

Original Comment#:

Comment: Was the total uranium dose calculated from produce grown adjacent to the Fernald site?

Response:

Action:

87. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 7.4.3

Page #: 7-5

Line#: 29-30

Code: C

Original Comment#:

Comment: Are these 20 locations residents gardens or does this include the produce stands too?

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Response:

Action:

88. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 7.5.2.1 Page #: 7-7 Line#: 14-16 Code:

Original Comment#:

Comment: Ohio EPA recommends that the SOPs (after revising them) be included in the IEMP.

Response:

Action:

89. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 7.6 Page #: 7-11 Line#: 30 Code: E

Original Comment#:

Comment: Omit the words "...and every third year thereafter,..."

Response:

Action:

90. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 8.0 Page #: 8-1 Line#: Code: C

Original Comment#:

Comment: Ohio EPA suggests that the Program Summary of the IEMP be located in the front of the document after Section 1.0. Since this section summarizes how the document is organized and describes the scope of the program, it seems logical that this section be placed up in front. Also, after reading the summary the order of things appeared to fall into place.

Response:

Action:

91. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 8.2.1 Page #: 8-1 & 8-2 Line#: 30-31 & 1-3 Code: E

Original Comment#:

Comment: This paragraph is unclear and difficult to follow. Please rewrite for clarity.

Response:

Action:

92. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 8.2.1 Page #: 8-2 Line#: 15-30 Code: C

Original Comment#:

Comment: As mentioned previously, Ohio EPA believes that the project specific emission-control monitoring and the ecological impact monitoring should be included in the IEMP.

Action:

Response:

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93. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 8.2.2 Page #: 8-2 Line#: Code: C

Original Comment#:

Comment: Ohio EPA believes that soil and grass sampling should be included in the scope of the IEMP for a couple of reasons. Historically, on-site (i.e., air monitoring stations) soil and grass sampling results have shown the soil data to be above background and above the FRL at location AMS03. This seems to be important enough to continue sampling soil at the on-site air monitoring stations until the data demonstrates otherwise. It may not be necessary or cost effective to continue with the grass sampling because the past results do not seem to indicate a correlation between total uranium uptake between the grass and soil. In addition, isn't this soil data significant when doing a pathway analysis? Isn't the soil data needed to carry out the calculations?

Action:

Response:

94. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 8.2.1. Page #: 8-3 Line#: 37-41 Code: C

Original Comment#:

Comment: This paragraph seems to be contradicting what has been previously stated throughout the document. It comes across as though the IEMP will be the only document that will hold information or data on each project taking place at Fernald or in some places it seems it is saying that all changes to the programs will be going into the IEMP? Please restate.

Action:

Response:

95. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 8.2.1 Page #: 8-3 Line#: 36 Code: C

Original Comment#:

Comment: This section number "8.2.1" is out of sequence. It should be "8.2.3".

Action:

Response:

96. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 8.2.1 Page #: 8-4 Line#: 20-23 Code: C

Original Comment#:

Comment: These three sentences need rewording because they are not exactly correct. Ohio EPA conducted an evaluation of DOE's EMP and submitted the document to DOE in April 1995. Ohio EPA's evaluation of DOE's EMP is an on-going process. We continue to monitor and re-evaluate the EMP, throughout the year, and discuss any discrepancies with DOE at the time they occur. In addition, Ohio EPA submits an Annual Report to the public once a year. This report contains activities that have taken place within that year and presents environmental monitoring

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data that Ohio EPA has collected. Ohio EPA's Annual Report to the public should not be confused with the IEMP's reporting process. Please clarify.

97. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 8.3 Pg #: 8-4 Line #: 31-32 Code: C

Original Comment #:

Comment: The IEMP currently calls for release of IEMP and project specific monitoring data in a quarterly status report to EPA and to Ohio EPA. The document fails to recognize an avenue to provide this data to the public. This data should also be made available to the public (possibly in the Reading Room) on a quarterly basis.

Response:

Action:

98. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: Appendix B Pg #: Line #: Code: C

Original Comment #:

Comment: Insufficient detail has been presented in this document for through evaluation of the ground water monitoring system for the OSDF. It is the responsibility of DOE to technically demonstrated that the ground water monitoring program will adequately monitor the ground water up and down gradient of all OSDF cells. This includes the periods during and after cell constructions and during and after CERCLA ground water clean-up. This document does not address ambient ground water flow directions or ground water flow directions altered by pumping and injection. This document also does not contain rational for individual monitoring well density and placement.

The OSDF ground water monitoring plan was to be treated as is it were part of a PTI submittal for a landfill. The OSDF 90% construction plan and the IEMP do not meet this expectation.

Response:

Action:

99. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: B.1 Pg #: B-1 Line #: 20 Code: E

Original Comment #:

Comment: Add "and the glacial till" to "the Great Miami Aquifer."

Response:

Action:

100. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: B.1 Pg #: b-1 Line #: 22 Code: E

Original Comment #:

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Comment: This wording implies that only two monitoring wells will be monitored per cell. This should be re-worded.

Response:

Action:

101. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: B.4 Pg #: B-6 Line #: 1-2 Code: C

Original Comment #:

Comment: The DOE has stated in the past that ground water movement in the glacial till is almost exclusively vertical. This line is not consistent with that claim.

Response:

Action:

102. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: B.4 Pg #: B-11 Line #: 8-12 Code: C

Original Comment #:

Comment: Once wastes are placed in an OSDF cell, conditions are no longer considered baseline.

Response:

Action:

103. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: B.4 Pg #: B-12 Line #: 12-17 Code: C

Original Comment #:

Comment: Detailed designs for the till monitoring system are required in this plan. The 90% OSDF document was not clear concerning till monitoring well construction, and the IEMP was to serve as a detailed description of the OSDF ground water monitoring system.

Response:

Action:

104. Commenting Organization: Ohio EPA Commentor: DDAGW

Section #: B.5 Pg #: B-13 Line #: 1-4 Code: C

Original Comment #:

Comment: The Ohio EPA will be notified within 24 hours of the detection of a leak as indicated by the leak detection system, the evidence of a release to the till ground water, or a release to the GMA.

Response:

Action:

105. Commenting Organization: Ohio EPA

Commentor: OFFO

Section #: D.2.3 Pg #: D-9 Line #: General

Code: C

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Original Comment #:

Comment: It is unclear how fugitive emissions will be factored into the sitewide dose assessment. Stack emissions will be low to negligible, and fugitive emissions will become the primary source for off-site air emissions. How will fence line monitoring results be used/incorporated into CAP-88 modeling estimates?

Response:

Action: